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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Implement the Commission's Procurement Incentive Framework and to Examine the Integration of Greenhouse Gas Emissions Standards into Procurement Policies.	Rulemaking 06-04-009 (Filed April 13, 2006)

REPLY COMMENTS/LEGAL BRIEF ON FINAL WORKSHOP REPORT AND STAFF RECOMMENDATIONS REGARDING THE GREENHOUSE GAS EMISSIONS PERFORMANCE STANDARD OF THE NATURAL RESOURCES DEFENSE COUNCIL (NRDC), THE UTILITY REFORM NETWORK (TURN), THE UNION OF CONCERNED SCIENTISTS (UCS), AND THE WESTERN RESOURCE ADVOCATES (WRA)

October 27, 2006

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I. INTRODUCTION AND SUMMARY

The Natural Resources Defense Council (NRDC), The Utility Reform Network (TURN), the Union of Concerned Scientists (UCS), and Western Resource Advocates (WRA) respectfully submit these reply comments on the Final Workshop Report and Staff Recommendations in accordance with the "Assigned Commissioner's Ruling: Phase 1 Amended Scoping Memo and Request for Comments on Final Staff Recommendations" (ACR), dated October 5, 2006, consistent with ALJ Meg Gottsetin's email titled "Direction for Reply Comments in R.06-04-009" (ALJ's email), dated October 23, 2006, and pursuant to Rules 1.9 and 1.10 of the California Public Utilities Commission's (CPUC or Commission) Rules of Practice and Procedure.

NRDC is a non-profit membership organization with a long-standing interest in minimizing the societal costs of the reliable energy services that a healthy California economy needs. In this proceeding, we focus on representing our more than 131,000 California members' interest in receiving affordable energy services and reducing the environmental impact of California's electricity consumption. TURN is a non-profit consumer advocacy organization which represents the interests of California's residential and small commercial customers. TURN has approximately 25,000 dues-paying members. UCS is a leading science-based non-profit working for a healthy environment

and a safer world. Its Clean Energy Program examines the benefits and costs of the country's energy use and promotes energy solutions that are sustainable both environmentally and economically. WRA is a regional environmental law and policy center serving the Intermountain West States. Its Energy Program has been active before state public utility commission and other state and regional planning forums promoting clean energy investments for over 15 years.

We commend the Commission for the leadership role it has taken in establishing a greenhouse gas (GHG) emissions performance standard (EPS), which has now also been adopted into law on a statewide basis by Senate Bill (SB) 1368, signed by Governor Schwarzenegger on September 29, 2006. We strongly support the Commission's design and implementation of the EPS – an essential regulation that will protect Californians from the significant financial and reliability risks associated with additional investments in highly carbon-intensive generating technologies and help meet California's GHG reduction goals. We believe staff's final recommendations are largely consistent with SB 1368.

In these comments, we respond to the opening comments/legal briefs on the final staff recommendations submitted by various parties on October 18, 2006. We do not address issues that we have previously commented on in this proceeding. We refer the Commission to our "Opening Comments and Legal Brief on Final Workshop Report and Staff Recommendations Regarding the Greenhouse Gas Emissions Performance Standard of the Natural Resources Defense Council (NRDC), The Utility Reform Network (TURN), the Union of Concerned Scientists (UCS), and the Western Resource Advocates (WRA)" (Opening Comments) dated October 18, 2006, for a summary of our final positions on the implementation and design details of the EPS. Our reply comments are summarized as follows:

- We strongly recommend that the Commission reject SCE's proposal to allow LSEs to calculate an average emissions factor for a group of facilities supplying an unspecified resource contract.
- We disagree with SDG&E/SCG that the CEC's "Proposed Methodology to Estimate the Generation Resource Mix of California Electricity Imports" should form the basis for the imputed emissions rate for system power.

- We support IEP's request that the EPS should consider the emissions of all GHGs on a CO2-equivalent basis.
- We support ALJ Gottstein's proposed definition of "new ownership investment" as "any investment that is intended to extend the life of one or more units of an existing baseload powerplant for five years or more…" New ownership investments should not be defined only by increases in rated capacity.
- We disagree with EPUC/CAC that bottoming-cycle cogeneration technology should be excluded from the definition of "powerplants" under SB 1368.
- We urge the Commission to dismiss EPUC/CAC's interpretation that SB 1368 grants compliance to all existing gas-fired cogeneration facilities.
- SDG&E/SCG's "emissions avoided" approach is less accurate than the "conversion approach" for calculating credit for the used thermal load from cogeneration facilities.
- We strongly urge the Commission to dismiss PG&E's recommendation to use full load conditions in the documentation to evaluate emissions rate compliance with the EPS; documentation should instead use designed and intended heat rates to ensure an "apples-to-apples" comparison of emissions rates.
- We agree with EPUC/CAC that "annualized" and "average annual" capacity factor have the same meaning.
- We recommend that the Commission not predetermine methods of compliance for MJUs, as suggested by Sierra Pacific Power and PacifiCorp.
- CMUA/NCPA/SCPPA quotes from the Final Workshop Report a position on ESPs that is misattributed to NRDC/TURN/UCS/WRA.

II. DETAILED COMMENTS

1) We strongly recommend that the Commission reject SCE's proposal to allow LSEs to calculate an average emissions factor for a group of facilities supplying an unspecified resource contract.

Southern California Edison (SCE) proposes that load-serving entities (LSEs) should be allowed to calculate an average emissions factor for a group of facilities that supplies an unspecified resource contract (p. 10-11). We continue to assert that the EPS should be applied to all underlying facilities of a contract. If an LSE is able to identify

the facilities that will supply the electricity in a contract, then they should **not** be allowed in any situation to average the emissions from these identifiable facilities, which would create a significant loophole for facilities that on their own would not pass the EPS. These contracts should be considered specified contracts, even if the contribution from each unit to the contracted power is unknown, and each individual facility under contract (that meets the EPS screening criteria) should be required to pass the EPS for the contract as a whole to be allowed.

2) We disagree with SDG&E/SCG that the CEC's "Proposed Methodology to Estimate the Generation Resource Mix of California Electricity Imports" should form the basis for the imputed emissions rate for system power.

San Diego Gas & Electric Company/Southern California Gas Company (SDG&E/SCG, p. 14) supports the use of the California Energy Commission (CEC) May 2006 "Proposed Methodology to Estimate the Generation Resource Mix of California Electricity Imports." We are concerned that the CEC proposed methodology (which has not yet been adopted by the CEC) underestimates the portion of California imports that are generated from coal. The proposed methodology determines the contribution of each resource fuel type to the import mix based on a simulation of market clearing prices that assumes that coal-based power is imported only to the extent that it sets the market-clearing price. This methodology would appear to underestimate the amount of imported coal power, because it relies solely on a marginal analysis, ignoring the infra-marginal contribution of coal when it is not the price-setting fuel type. For example, during the times in which California imports both coal and natural gas, natural gas would almost certainly set the market-clearing price and would be the only fuel type counted in the resource mix under the proposed CEC methodology. NRDC has commented on these concerns at the CEC workshop discussing the proposed methodology on June 7, 2006. (For our full comments on the CEC proposed methodology, see workshop transcript at http://www.energy.ca.gov/global_climate_change/inventory/documents/2006-06-07_workshop/2006-06-07_TRANSCRIPT.PDF, p. 70-73.)

This proposed methodology for determining the resource mix of imported electricity, which if adopted would feed into the CEC Net System Power resource mix, is one of the reasons we are concerned about the inaccuracy of using the Net System Power

to calculate an imputed emissions rate for system power. As we stated in our opening comments, we are willing to support using the Net System Power ***only*** if the highest emissions rate is used for each fuel type, since we have no way of knowing which technology is used for each fuel type. (See our October 18, 2006 Opening Comments, p. 24-25). For this reason, we also believe that the Division of Ratepayer Advocates (DRA) is incorrect to use an emission rate of 1.91 lb CO2/MWh for coal (p. 6), which is in fact *lower* than the lower end of the range of emission rates of existing coal plants (1.95-2.56 lb CO2/MWh) provided in data request #3 in this proceeding.

3) We support IEP's request that the EPS should consider the emissions of all GHGs on a CO2-equivalent basis.

The Independent Energy Producers Association (IEP) points to section 8340(g) of SB 1368 as intending the EPS to apply to the emissions of all GHGs, beyond just CO2 (p. 6-7). We support IEP in its recommendation that the Commission consider all GHG emissions, converted to CO2 equivalents, in the EPS.

4) We support ALJ Gottstein's proposed definition of "new ownership investment" as "any investment that is intended to extend the life of one or more units of an existing baseload powerplant for five years or more." New ownership investments should not be defined only by increases in rated capacity.

ALJ Gottstein proposed in an email dated October 23, 2006, to define "new ownership investment" (intended to encompass both repowering and major renovations to existing plants) as:

> Any investment that is intended to extend the life of one or more units of an existing baseload powerplant for five years or more, or results in a net increase in rated capacity of that powerplant. "Rated capacity" refers to the nameplate capacity of the plant, i.e., the plant's maximum rated output under speific conditions designated by the manufacturer and usually indicated in a nameplate phycially attached to the generator.

We support the first clause of the proposed definition: "Any investment that is intended to extend the life of one or more units of an existing baseload powerplant for five years or more." We urge the Commission **not** to adopt the "net increase in rated

capacity" definition, as proposed by some parties, including Pacific Gas and Electric Company (PG&E, p. 5) and SDG&E/SCG (p. 6). Under this interpretation, an existing high-emitting power plant with emissions above the EPS would not be subject to the EPS upon repowering or renovation if it did not increase the plant's rated capacity, although it would still present significant financial and reliability risks to California customers. Just as there is no basis in SB 1368 for a substantive size threshold (see p. 14 of our opening comments on the final workshop report), there is also no reason to apply a size threshold to repowering or renovations. SB 1368 clearly intends the EPS to apply to new *financial commitments*.

Thus, *any* new financial commitment that will extend the life of a baseload powerplant (as defined by SB 1368) for five or more years should be subject to the EPS. We are willing to support the full definition of repowering and renovations as proposed by the ALJ, *only* if the two conditions ("intended to extend the life of one or more units of an existing baseload powerplant for five years or more" and "results in a net increase in rated capacity of that powerplant ") continue to be separated by an "or" clause.

5) We disagree with EPUC/CAC that bottoming-cycle cogeneration technology should be excluded from the definition of "powerplants" under SB 1368.

Energy Producers and Users Coalition/Cogeneration Association of California (EPUC/CAC) suggest that bottoming-cycle cogeneration facilities should be excluded from the definition of "powerplant" in SB 1368 and thus also excluded from application of the EPS (p. 7-8) or deemed compliant with the EPS (p. 9). However, SB 1368, Section 8340(m) is clear that "powerplant means a facility for the generation of electricity…" A new financial commitment to any facility, including bottoming-cycle cogeneration technology, that produces electricity at an annualized capacity factor of at least 60% and delivers energy to California consumers should be subject to the EPS.

6) We urge the Commission to dismiss EPUC/CAC's interpretation that SB 1368 grants compliance to all existing gas-fired cogeneration facilities.

EPUC/CAC claims that the intent of SB 1368 is to deem all existing natural gas cogeneration facilities to be compliant with the EPS and thus requests the Commission

adopt this position (p. 8-9). On the contrary, SB 1368 does not provide for such a stipulation. The statute is clear in its definition of "combined cycle natural gas" power plants in Section 8340(b). In addition, the inclusion of Section 8341(d)(3) for "calculation of emissions of greenhouse gases for cogeneration" indicates that SB 1368 intends for the EPS to apply to cogeneration facilities, with credit given for their used thermal load. We urge the Commission to dismiss EPUC/CAC's request in order to be consistent with SB 1368.

7) SDG&E/SCG's "emissions avoided" approach is less accurate than the "conversion approach" for calculating credit for the used thermal load from cogeneration facilities

SDG&E/SCG "emissions avoided" approach (p. 16-20) for calculating credit for cogeneration facilities is flawed for several reasons. First, the SDG&E/SCG approach requires making an arbitrary assumption about the efficiency of the gas boiler that would have been displaced by the heat output of the cogeneration facility. Secondly, not all cogeneration facilities are gas-fired, so it would be inaccurate to assume a general efficiency for all boilers. Third, SDG&E/SCG recommend drawing on CEC data to determine the general efficiency of gas boilers, but this data may not be representative of boilers located outside of California. Fourth, SDG&E/SCG recommend alternatively setting the boiler efficiency at the minimum state or local standards, but the cogeneration facilities under consideration are not necessarily new facilities and thus it would not be accurate to assume that the boiler that would have been used in its place would have efficiencies that meet the current standards. We continue to recommend using a "conversion" approach that provides credit only for thermal energy that is in fact used, as it is the more accurate approach and does not require making arbitrary assumptions. For a full discussion, please see our opening comments on the Final Workshop Report at pages 17-19. (See our October 18, 2006 Opening Comments, p. 17-19.)

8) We strongly urge the Commission to dismiss PG&E's recommendation to use full load conditions in the documentation to evaluate emissions rate compliance with the EPS; documentation should instead use designed and intended heat rates to ensure an "apples-to-apples" comparison of emissions rates.

PG&E recommends that guidance should be provided to LSEs to use full load conditions of a facility to calculate projected emissions (p. 6). As we explained in comments previously submitted in this proceeding, using the full load heat rate of a facility to calculate its emissions rate would underestimate the actual emissions rate of the facility and is inconsistent with the manner in which the EPS level is being set. (See "Reply Comments on Draft Workshop Report Regarding the Greenhouse Gas Emissions Performance Standard of the Natural Resources Defense Council (NRDC), The Utility Reform Network (TURN), the Union of Concerned Scientists (UCS), and the Western Resource Advocates (WRA)," September 15, 2006, p. 6-7.) We strongly urge the Commission to clarify that the documentation required to show compliance with the EPS include the use of designed and intended heat rates, **not** full load heat rates.

9) We recommend that the Commission not predetermine methods of compliance for MJUs, as suggested by Sierra Pacific Power and PacifiCorp.

Sierra Pacific Power (p. 3) misrepresents the final staff recommendation on the compliance process for multi-jurisdictional utilities (MJUs) by misquoting staff's position on SB 1368, Section 8341(d)(9)(B). This section of the Final Workshop Report (p. 53) does not represent staff's position but instead is a quote of PacifiCorp's position in post-workshop comments as summarized by the workshop report.

We do not believe it is necessary or appropriate as part of this rulemaking for the Commission to identify the various possible proposals for MJUs' compliance with the EPS, except to specify that it must satisfy the SB 1368 criteria in Section 8341(d)(9). We continue to encourage the Commission to allow opportunities for public comment on MJUs' proposals for alternative compliance as they are evaluated and implemented.

In addition, the MJU process laid out by SB 1368 is an alternative compliance route, not an "exemption route" as described by Sierra Pacific Power (p. 3).

10) We agree with EPUC/CAC that "annualized" and "average annual" capacity factor have the same meaning.

The ALJ's October 23, 2006 email requests comments from parties regarding their position on EPUC/CAC's request that SB 1368's term "annualized" capacity factor is defined as "average annual" capacity factor. We agree that "annualized" and "average annual" capacity factor have the same meaning.

11) CMUA/NCPA/SCPPA quotes from the Final Workshop Report a position on ESPs that is misattributed to NRDC/TURN/UCS/WRA.

California Municipal Utilities Association/Northern California Power Agency/Southern California Public Power Authority's (CMUA/NCPA/SCPPA) quote a position from the Final Workshop Report on energy service providers (ESPs) that is misattributed to NRDC/TURN/UCS/WRA:

> ESPs operate fundamentally differently from the IOUs. Their procurement plans and transactions are not subject to the requirements of AB 57, therefore EPS compliance monitoring for ESPs must be conducted differently than that for the IOUs. The Revised Staff Proposal appears to present conflicting statements with respect to how ESP compliance with the EPS will be determined. EPS monitoring and compliance fails to reflect important distinctions between ESP and IOU compliance.

We would like to alert the Commission and other parties to this error in the Final Workshop Report on page 76 that misattributes this statement to our collective parties. Nowhere in our comments previously filed in this proceeding do we make this statement. We refer the Commission to page 7 of our October 18, 2006 Opening Comments on the Final Workshop Report for our position on the compliance process that we recommend for ESPs. Namely, although we believe the Commission should consider ESP's existing reporting schedule in developing an ESP compliance process, it is imperative that the standard must be enforced on an upfront basis for all LSEs.

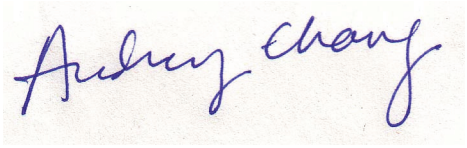
III. CONCLUSION

We commend the Commission for proactively seeking to establish a GHG performance standard that can be easily and quickly implemented. The standard is critically needed to protect Californians from the significant financial and reliability risks

associated with new investments in highly carbon-intensive generating technologies and to help meet California's GHG reduction goals. We support the staff's final proposal for the EPS as being largely consistent with the requirements of SB 1368, and urge the Commission to adopt the modifications we suggest in these comments to make the EPS fully consistent with SB 1368. We continue to look forward to further developing and finalizing the details of the EPS with the Commission and other parties.

Dated: October 27, 2006

Respectfully submitted,



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CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the **"Reply Comments and Legal Brief on Final Workshop Report and Staff Recommendations Regarding the Greenhouse Gas Emissions Performance Standard of the Natural Resources Defense Council (NRDC), The Utility Reform Network (TURN), the Union of Concerned Scientists (UCS), and the Western Resource Advocates (WRA)" in the matter of R.06-04-009** to all known parties of record in this proceeding by delivering a copy via email or by mailing a copy properly addressed with first class postage prepaid.

Executed on October 27, 2006 at San Francisco, California.

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